

TREASURE

OUR

north carolina

COASTS

and

ESTUARIES

miles of coastline  
**3,375**

coastal population in 2000  
**826,019**

fy03 czma core (section 306)  
funding  
**\$2,000,000**

fy03 czma enhancements  
(section 309) funding  
**\$396,000**

fy03 coastal nonpoint  
implementation  
**\$233,000**

fy03 national estuarine research  
reserve operations, education,  
monitoring and stewardship  
**\$555,000**

THE 20 COUNTIES THAT COMPRISE NORTH CAROLINA'S DIVERSE COASTAL AREA INCLUDE BARRIER ISLANDS THAT PROVIDE OVER 320 MILES OF OCEAN-FRONT BEACH AND VAST ESTUARINE AREAS THAT BORDER SOUNDS AND TIDAL RIVERS. THESE AREAS SUPPORT SUBSTANTIAL YEAR-ROUND AND TOURIST POPULATIONS, BUT AT THE SAME TIME PROVIDE IMPORTANT HABITAT FOR FISH AND WILDLIFE. IN 2001, TOURISM IN THE COASTAL COUNTIES GENERATED AN ECONOMIC IMPACT OF NEARLY \$1.8 BILLION, WHILE THE TOP-VALUED SEAFOOD CROP IN THE STATE THAT YEAR, BLUE CRAB, WAS VALUED AT \$32 MILLION. THE COASTAL ZONE MANAGEMENT ACT (CZMA) PROVIDES THE FRAMEWORK NECESSARY TO SUSTAIN THE ECONOMIC AND ECOLOGICAL VALUE OF NORTH CAROLINA'S COASTAL AREAS. THIS LAW, WHICH IS ADMINISTERED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), RECOGNIZES A NATIONAL INTEREST IN OUR COASTAL AND OCEAN AREAS. IT ALLOWS EACH STATE AND TERRITORY, NOT THE FEDERAL GOVERNMENT, TO DETERMINE HOW BEST TO BALANCE CONSERVATION OF THE COASTAL ENVIRONMENT WITH HUMAN USES THAT DEPEND ON COASTAL RESOURCES.

## THE CZMA IN NORTH CAROLINA

The CZMA establishes two programs to balance the use and protection of America's coasts. The Coastal Management Program gives states a flexible framework to address a broad range of community development, economic, and natural resource issues at the state and local level. The National Estuarine Research Reserve System protects key coastal areas for long-term scientific study, education, and resource stewardship.

### *North Carolina Coastal Management Program*

*Approved: 1978*

*Lead Agency: Department of Environmental and Natural Resources,  
Division of Coastal Management*

North Carolina's coastal program works to protect coastal wetlands, estuaries, barrier islands, and other critical areas. It does this by reviewing coastal develop-



ment, by helping state and local governments with local land-use planning, by reviewing federal and state projects to ensure that they are consistent with state coastal policies, and protecting a system of coastal natural areas. The program also improves the public's access to public beaches and waterfronts.

Accomplishments of the North Carolina Coastal Management Program include:

- *providing financial and technical assistance to 20 counties and 70 municipalities since 1975 for land use plans (approximately \$480,000 in state and local funds awarded each year) that guide growth to areas best suited for development;*
- *awarding more than \$10 million in state and federal funds to local governments for public beach and waterfront access projects (more than 280 sites throughout the coastal area);*
- *developing a comprehensive Wetland Conservation Plan that used Geographic Information Systems to map every type of wetland in the coastal counties, categorize them according to their importance to the overall system, and identify their restoration potential;*
- *acquiring six sites for a state coastal reserve system for a total (including the National Estuarine Research Reserve sites) of more than 40,000 acres of protected natural areas open to the public for research, education, and limited recreation;*
- *implementing an oceanfront development setback to protect homes and other buildings from storms and erosion, and reduce the need for public spending for disaster response;*
- *implementing a development setback along non-ocean shorelines to protect coastal water quality, reduce flood damage, and protect coastal vistas;*
- *prohibiting the use of hard erosion-control structures, such as sea walls, along the oceanfront, ensuring that the state has wide sandy beaches and dunes, which absorb wave energy; and*
- *limiting development in volatile inlet areas to reduce the risk of frequent property damage.*

### ***North Carolina's National Estuarine Research Reserve Currituck Banks, Rachel Carson, and Zeke's Island (1985); Masonboro Island (1991) Designated: 1985-1991***

***Lead Agency: Department of Environmental and Natural Resources, Division of Coastal Management***

The North Carolina National Estuarine Research Reserve is part of a national network of coastal protected areas that conduct science, education, and resource stewardship. The reserve system is a partnership between NOAA and the states. North Carolina's estuarine system is the third largest in the country, encompassing more than two million acres. The reserve is comprised of four sites that protect 10,000 acres. The reserve studies these areas to learn more about effective management of the coast. The four sites are located near Corolla (Currituck Banks), Beaufort (Rachel Carson), and Wilmington (Masonboro Island and Zeke's Island).

**RESEARCH:** The Research Office initiates and conducts research into the dynamics of estuaries. Two such projects are the Habitat Assessment Tool (wide-area water quality assessment) and the Telemetry Project (real time data transmission from field stations). Both of these projects have system-wide applications for data management and for coastal/ocean observing.

**EDUCATION AND OUTREACH:** The reserve's educational activities include field trips, workshops, and outreach programs. Workshops and training programs are conducted for adult audiences to promote best management practices for coastal resource issues, such as the use of vegetated buffers around marshes.

The North Carolina Reserve also reaches thousands of students and teachers each year through Estuary Live. Estuary Live is an award-winning internet-based field trip program that is broadcast live over the web twice a year in North Carolina. The Reserve's success with internet field trips has inspired Estuary Live to become a national event to celebrate Estuaries Day, supported by NOAA and the Environmental Protection Agency.

## PARTNERSHIPS IN ACTION

The North Carolina coastal program and North Carolina National Estuarine Research Reserve have worked together to hold Coastal Decisionmaker Workshops for local government officials on a variety of coastal topics. These workshops have discussed the importance of vegetated buffers to prevent erosion and water pollution, the role of estuaries as shellfish habitat, and conservation of flyways for migratory birds. The workshops have been well received by local officials. Together, the coastal program and reserve have devised a strategy to deliver the information and training that local decisionmakers need.